

DEPARTMENT OF THE NAVY HEADQUARTERS UNITED STATES MARINE CORPS WASHINGTON, DC 20380-0001

MCO 4105.2 LMA-4-dt 4 Nov 1987

MARINE CORPS ORDER 4105.2 W/CH 1

From: Commandant of the Marine Corps

To: Distribution List

Subj: Marine Corps Warranty Program

(b) Defense Federal Acquisition Regulation Supplement (DFARS) 46.7 (NOTAL)

(c) Navy Acquisition Regulation Supplement (NARSUP)
46.7 (NOTAL)

- (d) DoD-Hdbk-276-1
- (e) MIL-STD 881A
- (f) MCO 4855.10A
- (g) MCO P4000.21A
- (h) MIL-STD 130
- (i) MIL-STD 129
- (j) NavCompt Manual, volume 4, 043108

Encl: (1) Definitions

- (2) Standard Warranty Procedures
- (3) Expected Failure Concept
- (4) Warranty Claim Data Report Format

Report Required: Warranty Claim Data (Report Symbol MC-4105-01), par. 5b(9), and encl (4)

- 1. <u>Purpose</u>. To promulgate policy described in references (a) through (c) and assign responsibilities for the management and execution of the Marine Corps Warranty Program.
- 2. Background. Reference (a) added Section 2403 to Title 10 of the United States Code and requires the Department of Defense (DoD) to obtain warranties in contracts for weapon systems awarded after 1 January 1985. Specifically, the section requires that weapon systems with a unit cost of more than \$100,000 or a projected total procurement cost of more than \$10,000,000 possess a warranty in which the contractor warrants:
- a. That the weapon system conforms to the design and manufacturing requirements specifically cited in the contract.
- b. That the weapon system is free from defects in material and workmanship.

c. That the weapon system meets or exceeds the essential performance characteristics specifically delineated in the contract.

This section describes various remedies for the contracting officer should the warranty be invoked. These include: requiring the contractor to promptly take action to correct the deficiency at no additional cost to the Government or requiring the contractor to pay costs incurred by the Government to correct the problem. The law requires contracting officers to tailor warranties to fit the particular acquisition and describes criteria for waiving warranty requirements on systems acquisitions. These areas are discussed in greater detail in the following sections.

- 3. <u>Objectives</u>. The objectives of the Marine Corps Warranty Program are to ensure that the weapon systems acquired perform as required, conform to the design and manufacturing requirements specified, are free from defects in materials and workmanship, and finally, to ensure that the new weapon sytems/equipment contribute to increased readiness throughout the Marine Corps.
- 4. Policy. The stated objectives can best be accomplished through the judicious development, acquisition, and implementation of performance assurance warranties for new weapon systems and selected equipment. The following policy is applicable for all acquisitions in which the Marine Corps is the contracting authority:
- a. A warranty shall not be used as a substitute for proper logistics planning and acquisition of the elements of integrated logistics support for the system or as a means of acquiring interim contractor support. Warranty considerations shall become part of the acquisition planning process and acquisition documentation.
- b. Per references (b) and (c) the Marine Corps shall acquire only those warranties demonstrated to be cost-effective. A documented cost benefit analysis shall be used to determine the cost effectiveness of a proposed warranty. Prior to performing the analysis, the Government shall require the contractor to identify all contractor costs associated with the warranty or to separately price the proposed warranty. The analysis shall become part of the contract file and program documentation.
- (1) The cost benefit analysis shall be a comparison of the life cycle costs without a warranty and the life cycle costs with a warranty. The warranty cost benefit (WCB) shall be defined as the result obtained when subtracting the life cycle costs with a warranty from the life cycle costs without a warranty. If the WCB is equal to zero or is positive it may be assumed that the warranty is cost-effective. If the WCB is negative, then the warranty may be assumed not to be cost-effective and a waiver

should be requested using the procedures described in paragraph 4c, following. As a minimum, the following cost factors shall be included in the life cycle cost computation for the analysis:

- (a) Estimated cost to the Government (price) of the warranty.
- $\mbox{\ensuremath{\mbox{(b)}}}$ Estimated cost for correction or replacement by the Marine Corps.
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- (d) Indirect costs incurred by the Marine Corps to maintain the warranty in effect. Examples of indirect costs include, but are not limited to; costs of warranty defaults, reduced opportunities for breakout, and reduced opportunities for competition.
- (e) All administrative costs associated with tracking and processing warranty claims, maintaining warranty related records, and reporting of warranty related information. (Note: reference (d) can be used to perform the analysis in the detail necessary.)
- c. When determined to be cost-effective, the Marine Corps shall acquire warranties on weapon systems/equipment that meet the following criteria, unless a waiver of the warranty requirement has been approved by the Assistant Secretary of the Navy (Shipbuilding and Logistics) (ASN(S&L)). A warranty is required if the system or equipment:
- (1) Is a weapon system, as defined in enclosure (1), with a unit cost exceeding \$100,000 or with a projected total procurement cost exceeding \$10,000,000.
- (2) Is an item subordinate to the weapon system level and:
- (a) Falls within the cost criteria described in paragraph 4c(1). These items would include major components of the system or other equipment integrated to form a system. Spare parts will not be subject to warranties under this Order.
- (b) Occurs no lower than level 3 of the work breakdown structure of the system. (Refer to reference (e)).
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- d. When the Principal Development Activity (PDA) or contracting authority is other than the Marine Corps, the Marine Corps shall provide its warranty requirements to the PDA or contracting authority for inclusion in the-contract. In the event the other service PDA or contracting authority has developed warranty provisions for the proposed contract the Marine Corps shall acquire that warranty as long as it does not violate the policy described herein. The policy described herein is not applicable to weapon systems/equipment procured and supported totally through Navy appropriations (i.e., aviation-weapon systems and equipment) but may be used for guidance in structuring warranty provisions for those systems/equipment.
- e. The Marine Corps shall tailor warranties, consistent with the requirements of this Order, to meet the unique circumstances of each acquisition. Warranties acquired by the Marine Corps shall generally provide for two types of coverage; these are, systemic defect and individual item failure coverage.
- (1) Systemic defect coverage provides coverage for the entire weapon system. This level of coverage is appropriate when describing essential performance characteristics for the system. Indicators of systemic deficiencies are frequent Quality Deficiency Reports (QDR) on particular parts of the system or the system itself that establish a trend of failures indicating a possible design deficiency as well as the inability of the system to meet the contractually specified essential performance characteristics. When systemic defects exist, the warranty remedy should call for total asset remedies which could take the form of recalls, repairs, contract price reductions, or combinations of these.
- (2) Individual item coverage refers to the coverage extended to those components reparable at the 4th echelon or higher and those warranted parts occurring at/or above level 3 of the work breakdown structure. Items selected for individual item warranties should normally be high dollar components.
- f. Warranties shall be acquired for equipment that does not meet the definition of a weapon system only when they are demonstrated to be cost-effective.
- g. Commercial warranties are often available when procuring nondevelopmental items. In cases where a commercial warranty is available it will normally be acquired instead of negotiating a separate warranty agreement. These warranties may be acquired if one of the following is true:
- (1) They are cost-effective and can be executed with existing supply and maintenance procedures to include administrative procedures for tracking and executing the warranty.

- (2) The warranty cost cannot be severed from the item price to effect a price reduction for the item.
- * h. The Marine Corps shall seek a waiver from the ASN(S&L) when the results of the cost/benefit analysis indicate the acquisition of a warranty would not be cost-effective; when relief is desired from-one of the three areas requiring warranty coverage as described in paragraph 4j, following, or when it is in the interest of the national defense not to have a warranty on a particular system. These waivers shall be initiated by the Program Manager (PM) and processed, via the Commanding General (CG), Marine Corps Research, Development, and Acquisition Command (MCRDAC), and forwarded for approval to the ASN(S&L).
- i. Acquired warranties shall be compatible with existing Marine Corps supply and maintenance procedures so that support for the item, while under warranty, will not differ from the follow-on support provided after the warranty expires. Using unit participation in the implementation, execution, and administration of warranties shall be kept to a minimum; this includes minimizing the imposition of additional supply and maintenance administrative procedures for tracking and administering warranties for equipment in using units (i.e., first, second, and third echelon maintenance capable units). The following shall be considered when developing warranty terms:
- (1) The requirements for storage or service of warranted items, while under warranty, shall not differ from their post warranty requirements.
- (2) Supply support procedures for warranted items shall operate within the existing Marine Corps supply system.
- (3) Existing Marine Corps maintenance management procedures shall be used to document maintenance on warranted items. Warranty claims shall be submitted by the warranty coordinators per enclosure (2) and the provisions of reference (f).
- j. The Marine Corps shall require the contractor to warrant that the weapon system provided under the contract conforms to the design and manufacturing requirements specified in the contract; the weapon system provided under the contract is free from all defects in materials and workmanship; and the weapon system, if manufactured in mature production, conforms to the essential performance characteristics specified in the contract. References (a), (b), and (c) apply.
- k. Contracts with a warranty shall contain terms that permit the contracting officer to require the contractor to take whatever corrective action is necessary at no cost to the Government to correct the deficiency, to equitably reduce the contract

price, or to require the contractor to pay costs reasonably incurred by the Government to correct the deficiency. Corrective action shall be completed within time limits specified in the contract. Contract terms shall allow the Marine Corps to repair a warranted item.

- 1. The Marine Corps shall not require a contractor to warrant government-furnished equipment (GFE).
- m. The Marine Corps shall not seek warranties in cost reimbursement contracts.
- n. The Marine Corps shall seek warranties on technical data as defined in reference (g) when it is cost-effective to do so. Warranties for technical data should be subjected to the same criteria and cost effectiveness requirements as their hardware counterparts. Warranted technical data shall be marked to indicate the warranty coverage and expiration date.
- o. The Marine Corps shall use the expected failure concept detailed in enclosure (3) when developing the item warranty.
- p. The duration of the warranty should be of sufficient time to ensure that those items placed in storage will have warranty protection upon placement in service. In some cases, when extended storage (storage duration to exceed 1 year) is planned for new equipment (i.e., Selected Marine Corps Reserve (SMCR) units) the Marine Corps may seek provisions in the contract that provide for extended warranty coverage for equipment placed in extended storage.
- (1) The warranty duration shall be expressed in two terms, the first being some measure of operational use such as miles, hours of operation, rounds fired, etc. which is sufficient in quantity to ensure the quality of the system/equipment. The second term shall be a period of time extending from the date of acceptance for a period of days, months, or years into the future during which the Government may seek remedies as defined in the contract to deficiencies in the system. For example, a new truck is being fielded with several vehicles in the first production lot destined for delivery to the Maritime Prepositioned Ship (MPS) Program for at least 1 year of storage. Average yearly mileage for the truck is 12,000 miles and at least 1 year of warranty protection is desired for all operational vehicles. warranty duration might read, "12,000 miles or 24 months whichever comes first." This would permit storage of some vehicles for up to 1 year and still allow for warranty coverage when put into operation. Those vehicles immediately put into operation would have up to 24 months of warranty protection as long as their mileage remained under the 12,000-mile limit.

- (2) The warranties on individual items within a warranted system shall not have durations beyond that of the system warranty. In addition, if a warranted item is replaced prior to the expiration of the system warranty, the remaining duration on the individual item warranty shall not exceed the duration remaining on the system warranty. For example, a truck with a 24-month warranty on the entire vehicle also has individual item coverage for the engine for a period of 24 months. The engine fails and is replaced 18 months into its life. The new engine only has 6 months of warranty coverage remaining.
- q. Items covered under a warranty shall be marked with the following information at a minimum: "WARRANTY ITEM," production contract number, production lot number, and expiration date/usage factor for the warranty for that production lot. For further information on the marking of warranted items, refer to references (h) and (i)
- r. The Marine Corps shall tailor warranties to meet the unique circumstances of each acquisition.
- (1) During the tailoring process the Marine Corps shall seek to limit systemic coverage to between three and seven essential performance characteristics; one of which shall be a system level reliability value accompanied by clear definitions of system failures.
- (2) Individual item warranty coverage for parts of the system shall be limited to those items reparable at fourth or fifth echelon maintenance or appear no lower than level 3 of the work breakdown structure.
- (3) During the tailoring process the Marine Corps shall use the expected failure concept described in enclosure (3) as the principal means of structuring the warranty. In some commercial warranties tailoring may not be possible. In these cases a failure free warranty may be more appropriate.
- s. The Marine Corps shall collect information on the use of warranties for analysis and reporting. This information shall include identification of the contract, the contractor, a summary of claim activity for the reporting period, and the cumulative claim activity for the contract. Claim activity shall include claims submitted, honored, disputed, denied, and the value of each category. Denied claims shall include the reason for denial and failure cause, if known.
- t. The Marine Corps shall ensure that one or more of the following remedies are available to the Government when a warranty is breached for a weapon system or equipment. These remedies shall be clearly described in the provisions of the contract.

- (1) In cases where a production contract is still in place, the Marine Corps shall seek to equitably reduce the contract price in an amount eaual to the cost of parts, transportation costs, handling costs, and labor costs if any are involved. For ease of administration, the reductions should be accomplished in block modifications to the contract on a quarterly or semiannual basis as specified in the contract.
- (2) If a production contract is not in place, the Marine Corps shall seek replacement of the faulty parts or components covered by the warranty. If labor costs are involved, the contracting officer shall seek additional spares in type to theones that failed and in an amount equal to the value of the labor costs incurred in lieu of receiving monetary reimbursement for the items. Transportation and handling costs for replacing warranted items shall be borne by the contractor.
- (3) Monetary reimbursements for parts, labor, and other costs shall be considered to represent a reduction in the contract price or an overpayment to the contractor. As such, the proceeds shall be collected and accounted for using procedures described in reference (j). These proceeds shall revert to the appropriation or appropriations concerned when the issue of reimbursement is covered by an agreement between the contracting parties. Monetary reimbursements shall be addressed in the warranty provisions of the contract.
- (4) When the system fails to meet its essential performance characteristics as evidenced by a trend analysis of QDRs, by the systems failure to perform as required, or when the number of system failures exceeds the threshold established for the system, the Marine Corps/Government agent shall seek redesign of the component, subsystems, or system (as necessary) to ensure the system conforms to the essential performance characteristics described in the contract. Additionally, the contractor shall be required to bear the costs of modifying existing inventory (end items and spare parts) to correct the deficiency. Such redesign, testing, modification, and related costs shall be borne by the contractor. Provisions for warranty coverage of redesigned components, subsystems, or system should be described in the contract.
- (5) Warranty remedies shall not be any less responsive than normal Marine Corps supply and maintenance turnaround times. Responsiveness in terms of time between the warranty claim notification and resolution shall be addressed in the warranty provisions of the contract.
- u. Warranty procedures shall allow for the Marine Corps to effect its own repairs without voiding the remaining warranty.

The cost of Marine Corps repair of a defect which is covered by the warranty shall be at the contractor's expense.

v. Warranty procedures identified in enclosure (2) shall be tailored to the designated equipment and included in an advance logistics order (ALO).

5. Responsibilities

- a. The CMC is responsible for the following:
 - (1) The CMC (L) shall:
- * (a) Issue policy for the technical and statutory requirements of warranties for Marine Corps acquired items (L)
- * (b) Issue policy regarding data collection and reporting used to identify warranties, determine compliance, and ensure that acquired warranties are compatible with standard Marine Corps supply and maintenance procedures (L).
- * b. The CG MCRDAC shall:
- * (1) Assist PMs in the preparation and tailoring of warranty provisions for systems and equipment (PSI-L).
- * (2) Review and forward for approval to the ASN(S&L) all requests for waivers to the warranty requirements identified in reference (b) and maintain copies of all requests as part of the program documentation.
- * (3) Review trend analyses of QDRs submitted by Marine Corps Logistics Base (MCLB), Albany, to determine if essential performance characteristicS are being met or a design deficiency exists (PSI-G).
- * (4) Develop policy for the technical and statutory requirements of warranties, data collection, and compliance determination for the warranty program (PSI-L).
- * (5) The PM shall:
- (a) Identify within an ALO the following information: the essential performance characteristics included in the warranty, the national stock number (NSN) of individual warranted items, the duration of the warranties, and a description of the warranties at the system or individual item level. Identify any procedures that deviate from existing ones in implementing, executing, reporting, or administering the warranty.

- (b) Provide warranty execution training as an integral part of the fielding/new equipment training process for the item with emphasis on procedural differences that may be required due to geographic, organizational, or mission differences of the using units.
- (c) Ensure that a cost-benefit analysis is performed to determine the cost effectiveness of a proposed warranty.
- (d) Document and retain in the Master Acquisition Plan (MAP) and contract file (see reference (c)), the cost benefit analyses performed in the decision process to acquire or not acquire a warranty for the acquisition.
- (e) Request waivers for warranties on weapon systems/ equipment when the proposed warranty is not cost-effective or in the best interest of the Government. Copies of those requests shall be maintained as part of the program's documentation. Such waivers shall include the following information as a minimum:
- $\underline{1}$ A description of the system and its state of as well as the number of units delivered and anticipated to be delivered during the life of the program.
- 2 The specific warranty or warranties for which the waiver is requested, the duration of the waiver (if it extends beyond the contract under consideration), and the rationale for the waiver. Include in the rationale a statement describing the cost effectiveness of the warranty. This statement shall reference the analysis performed and documented to substantiate it.
- ${\tt 3}$ A summary of the assumptions, cost factors, benefits, and conclusions contained in the cost benefit analysis. Identify who performed the analysis.
- 4 A description of the techniques to be employed to assure acceptable field performance of the weapon system.
- (f) Ensure that procurement work orders (PWO) contain sufficient information on the equipment and the warranty desired to develop a warranty clause, a copy of the proposed warranty provision, or a copy of the approved waiver of the warranty requirement.
- * (g) Provide the CG MCRDAC with recommended essential performance characteristics.
- * (6) Approve the essential performance characteristics to be warranted by the contractor.

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c. The CG MCLB Albany shall:

- (1) Establish a warranty information data base for the collection and tracking of warranty claim and usage data to provide the information required for warranty assessments and reporting.
- (2) Act as the Marine Corps warranty administrator between the Marine Corps and contractor or administrative contracting officer (ACO)/principal contracting officer when a weapon system and/or components are to be supported by commercial or negotiated warranties.
- (3) Ensure that the procedures in enclosure (2) are used to notify contracting officers of warranty claims.
- * (4) Review draft ALOs to ensure the adequacy of warranty information. Provide comments and recommendations to the CG MCRDAC (PSI-L) to correct any deficiencies identified.
- (5) Receive, from contractors, monetary reimbursements and parts resulting from warranty claims.
- * (6) Conduct trend analyses of QDRs submitted per reference (f) to determine if warranted essential performance characteristic of the weapon system and/or components are being met. Advise the CG MCRDAC (PSI-G and the PM) of those instances where the trend analyses indicate the specified essential performance characteristics are not being met.
- * (7) Forward the results of the trend analyses of QDRs to the CG MCRDAC (PSI-G) along with a determination of whether or not the failures are the result of design or manufacturing defects.
- (8) As the warranty administrator collects the information required in paragraph 4s, preceding.
- * (9) Submit a consolidated report of warranty claim and usage data in the format described in enclosure (4) to the CMC (L) and the CG MCRDAC (PSI-L) 15 days after the end of the 2d quarter (for the period 1 January through 30 June) and the 4th quarter (for the period 1 July through 31 December). This report has been assigned Report Control symbol MC-4105-01.
- (10) Program or budget funds to administer the warranty program and for repair/replacement of the support items determined after negotiations with the contractor to be excluded from coverage by the warranty.

- * d. The CGs of the Fleet Marine Forces (FMFs), 4th Marine Division (MarDiv), 4th Marine Aircraft Wing (MAW), and Marine Corps Bases (MCBs) shall:
- (1) Ensure procedures are established down to the using unit implementing the warranty claim procedures identified in enclosure (2) of this Order.
- (2) Designate a point of contact for an installation of predetermined command/geographical area. The number of personnel/units contacting the contractor or dealership must be kept to a minimum to preclude conflicting resolution of warranty matters. Therefore, a warranty coordinator shall be appointed by the CG FMF as the point of contact within each FMF. The FMF warranty coordinator will ensure that warranty coordinators are appointed at commands possessing fourth echelon maintenance capabilities.
- (a) Continental United States (CONUS) or outside continental United States (OCONUS). Active U.S. Marine Corps units shall process warranty claims through appropriate support and maintenance channels-to the warranty coordinator.
- (b) SMCR. Reserve units possessing organizational maintenance capability, which are geographically separated from intermediate maintenance activities are authorized to make warranty determination and to coordinate warranty actions with the warranty administrator at MCLB Albany. Reserve units not possessing organizational maintenance capability will obtain warranty service through a supporting organizational maintenance activity.
- (3) Ensure warranty claims are filed for all failures of warranted items.
- (4) Ensure warranty coordinators are the focal point for coordinating all warranty actions between the using unit and local dealers or manufacturers, the warranty administrator, and contracting officers.
 - (5) Execute warranty procedures as described in ALOs.
- (6) Maintain files and records as necessary to manage the warranty program for weapon systems and locally procured equipment.
- (7) Ensure warranty coordinators provide information to the using units on warranty coverage and exclusions, clarify warranty claim issues, and provide assistance to implement the system warranties.

6. <u>Reserve Applicability</u>. This Order is applicable to the Marine Corps Reserve.

J. J. WENT

Deputy Chief of Staff

for Installations and Logistics

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DEPARTMENT OF THE NAVY HEADQUARTERS UNITED STATES MARINE CORPS WASHINGTON, DC 20380-0001

MCO 4015.2 Ch 1 LA-PSI-dt 12 Apr 1988

MARINE CORPS ORDER 4105.2 Ch 1

From: Commandant of the Marine Corps

To: Distribution List

Subj: Marine Corps Warranty Program

Encl: (1) New page inserts to MCO 4105.2

1. Purpose. To transmit new page inserts to the basic Order.

2. Background. As a result of the changes to the Marine Corps acquisition organization and the activation of the Marine Corps Research, Development, and Acquisition Command (MCRDAC) specific responsibilities in the management and execution of the Marine Corps Warranty Program must be reassigned.

3. Action

- a. Remove present pages 5, 6, and 9 through 12 of the basic Order and replace with corresponding pages contained in the enclosure hereto.
- b. Remove present pages 3, 4, 7, and 8 of enclosure (2) and replace with corresponding pages contained in the enclosure hereto.
- 4. <u>Change Notation</u>. paragraphs denoted by an asterisk (*) symbol contain changes not previously published.
- 5. <u>Filing Instructions</u>. This Change transmittal is filed immediately following the signature page of the basic Order.

J. J. WENT

Deputy Chief of Staff for Installations and Logistics

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DEFINITIONS

For the purpose of this Order, the following terms are defined:

- 1. Acceptance. The act of an authorized representative of the Government by which the Government assumes ownership of supplies tendered or approves specific services rendered as partial or complete performance of the contract.
- 2. Commercial Warranty. A warranty offered by a contractor that sells a substantial amount of the product being acquired by the Government to the general public. The warranty price is generally inseparable from the price of the item and there is no tailoring of the warranty provisions at the time of sale. An example of a commercial warranty would be the 90-day parts and labor warranty provided in the purchase of a new television set.
- 3. Cost Benefit Analysis. A process used to compare the total costs of a warranty with the benefits to be derived from that warranty. This analysis shall be conducted to identify the costs for the life cycle of the item both with and without a warranty. (Note: the DoD Life Cycle Cost Model is capable of performing that comparison. The difficult task is to identify all the associated costs and benefits and placing a dollar value on them for comparison purposes.)
- 4. <u>Defect</u>. Any condition or characteristic in any supplies or services furnished by a contractor, under a contract that is not in compliance with the requirements of the contract.
- 5. <u>Design and Manufacturing Requirements</u>. Structural and engineering plans and manufacturing particulars, including precise measurements, tolerances, materials, and finished product tests for the weapon system being produced.
- 6. Essential Performance Characteristics. Operating capabilities and reliability and maintenance characteristics of a weapon system/subsystem/component that are determined by the sponsor to be necessary for the system to fulfill the military requirement for which it was designed. Usually limited to three to seven characteristics that are readily measurable in an operational environment, though the number may be more if the complexity of the equipment warrants.
- 7. Failure-Free Warranty. A failure-free warranty requires a period of failure-free usage. Commercial and trade practices warranties are examples of this concept. (Note: under this concept, each claim is subject to the contract remedy during the warranty term. Since failures may occur, the cost of the warranty

- will normally include the expense of repair or replacement that can be expected during the warranty-term. This cost may be included in the-item-price and not identifiable as a separate cost. This type of warrantV may be more appr&priate when an item's reliability is unkftown or unspecified as in the case of a nondevelopment item. Administration costs usually increase because the warranty claims are processed at a lower level in the maintenance chain.)
- 8. Incentive Warranty. A type of warranty that provides incentives for the contractor to exceed minimum design, quality, or performance levels. For example, the contract may establish increasingly higher reliability levels above the minimum requirement with monetary rewards for the contractor should his system meet these higher standards. (Note: depending upon the structure of the warranty, this may or may not meet the requirements of the Defense Procurement Reform Act.)
- 9. Master Acquisition Plan. The principal planning document for each Marine Corps acquisition program. It describes the proposed system, provides a historical summary, provides guidance for each detailed supporting plan and includes a list of program objectives and milestones. Additional information concerning format and contents of this plan may be found in MCO P5000.10B.
- 10. <u>Mature Production</u>. Follow-on production of a weapon system after manufacture of the lessor of the initial production quantity or one-tenth of the projected total production quantity.
- 11. Performance Assurance Warranty. Term used to describe a warranty in which the primary intent is to assure that minimum design, quality, and performance levels are achieved. (Note: the Government is not seeking anything more than what the contract specifies, and the warranty concept and terms and conditions do not provide any incentives for the contractor to do otherwise. This is the type of warranty required by the new Defense Procurement Reform Act described earlier.)
- 12. <u>Prime Contractor</u>. A party that enters into an agreement directly with the United States Government to furnish goods or services.
- 13. Transition Plan. A plan which depicts those significant events and timing of those events to assure the orderly transition of supply support from the contractor to the Marine Corps Supply System.

- 14. Warranty. A promise or affirmation given by a contractor to the Government regarding the nature; usefulness, or condition of the supplies or performance of services furnished under the contract.
- 15. Warranty Administrator. An individual within a weapon system/equipment management (WS/EM) team who has total management responsibility for all warranty claims/actions regarding a specific weapon system/equipment.
- 16. Warranty Coordinator. An individual assigned responsibility for coordinating warranty actions/functions required between the user and the warranty administrator. (Note: a warranty coordinator will be appointed by the CG FMFs and serves as the point of contact within the FMF on warranty issues. Warranty coordinators appointed below the FMF level will normally be located at the force service support group (FSSG), units possessing fourth echelon maintenance capability, or units whose geographic location mandates an independent warranty coordination capability.)
- 17. Weapon System. A system or major subsystem used directly by the Armed Forces to carry out combat missions. (Note: the term includes, but is not limited to the following, if intended for use in combat missions, tracked and wheeled combat vehicles; self-propelled, towed and fixed guns, howitzers, and mortars; helicopters; naval vessels; bomber, fighter, reconnaissance and electronic warfare aircraft; strategic and tactical missiles including launching systems; guided munitions; military surveillance, command, control, and communication systems; military cargo vehicles and aircraft; mines torpedoes; fire control systems; propulsion systems; electronic warfare systems; and safety and survival systems. This term does not include related support equipment, such as ground handling equipment, training devices and accessories; or ammunition, unless an effective warranty for the system would require inclusion of such items. This term does not include items sold in substantial quantities to the general public as described in the Federal Acquisition Regulation 15.804-3(c)).

STANDARD WARRANTY PROCEDURES

- 1. <u>Purpose</u>. Certain procedures must be followed by the user of equipment under warranty contracts to ensure the warranty claim system agreed upon between the Marine Corps and the contractor will function as intended. These generic procedures are intended to describe the principal features of the warranty provisions of the equipment under warranty, to provide instruction defining the process of securing warranty services and/or parts covered under the warranty, and-to illustrate the proper method of processing warranty claims for service and/or parts. Specific warranty procedures tailored to individual equipment will be included in the applicable contract and promulgated in the equipment's ALO.
- 2. <u>Guidance</u>. Maximum cooperation between contractors, or their representatives, and the warranty administrator at MCLB Albany is desired and necessary. The warranty coordinator should not participate in warranty disputes. Warranty disputes should not cause repair of equipment to be held in abeyance pending resolution of disputes. Follow the local standing operating procedures (SOP) and the procedures detailed in this document when there is sufficient evidence that a warranted part is defective and that replacement parts and/or services or reimbursement is due the Marine Corps. All disputes will be transmitted from the warranty coordinator to the warranty administrator at MCLB Albany for evaluation and review. Disputes requiring resolution will then be forwarded to the contracting officer for appropriate action.

3. General Equipment Warranty

- a. A weapon system contract requires three specific warranties, one covering design and manufacturing requirements, one covering defects in materials and workmanship, and one covering essential performance requirements delineated in the contract.
- b. A warranty does not cover conditions resulting from misuse, failure to perform scheduled maintenance, or improper preservation during equipment storage. The warranty does not cover the replacement of consumable/expendable items (such as filters-and lubricating oils) used in connection with normal maintenance services.
- c. Upon receipt of the equipment, or as appropriate, the commencement dates of the warranty must be recorded in the remarks portion of the equipment record jacket NAVMC 696D (Motor Vehicle and Engineer Equipment Record Folder) or as directed if the equipment jacket is not used; i.e., if the Weapons Record Book Part 1 is used in lieu of the record jacket.

- d. Prior to placing new equipment in storage and again at the time of its withdrawal from storage, the contractor must be notified through the warranty administrator at MCLB Albany. For this action; use the eqquipment storage report formats which are provided with each end item when it leaves the contractor's facility. An equipment storage report must be partially prepared for each newly delivered equipment placed in government storage, and completed when each equipment is removed from storage and placed in service. It must be prepared properly and submitted within the following time schedules so the Government can fully realize the intended warranty benefits:
 - (1) In storage 15 days
 - (2) In service 5 days
- e. In the event of a warranted failure, the warranty coordinator may be required to deliver the equipment to an authorized dealership or warranty service shop.

4. Notification of Warranty Defect

- a. The using unit will immediately notify the warranty coordinator when a warranted item has failed. The warranty coordinator at the designated command/area shall notify the warranty administrator immediately thereafter. Such notification may be either telephonic or in writing. Any telephone notification will be followed by an SF 368 (Product Quality Deficiency Report) prepared per the current edition of MCO 4855.10. An information copy of the written notification, SF 368, will be provided to the FMF warranty coordinator. When repair is being accomplished by the Marine Corps, it will be so stated on the SF 368.
- b. Warranty coordinators will receive copies of all warranty-related SF 368 message QDRs. They will have the responsibility for the planning, execution, and monitoring of all warranty matters within the designated command/area. They will possess an overall perspective of the warranty related problems of the using units within the designated command/area.
- c. The warranty administrator shall notify the contracting officer within 5 working days after notification of a defect.
- d. The contracting officer shall provide disposition instructions to the warranty administrator within 5 working days after receiving the notification of defect.
- e. Upon receipt of disposition instructions from the contracting officer or contractor, the warranty administrator will notify the appropriate command of required actions within 2 days.

- f. Under the warranty, the Marine Corps should normally have the unilateral right to effect its own repair. If the Marine Corps elects to effect warranty repair or replacement itself, the following will be done:
- (1) The warranty coordinator will notify the warranty administrator within 10 working days after repair is complete. This notification will include the original SF 368 and the pink/photo copy of the equipment repair order (ERO)/ERO shopping list (EROSL) associated with that ERO.
- (2) The contracting officer or the contractor shall be notified by the warranty administrator within 30 days after discovery of the defects per paragraphs 4a and b, preceding.
- (3) The contracting officer or contractor shall provide disposition instructions to the warranty administrator within 5 days after receiving initial Marine Corps notification of defect. The warranty administrator shall take action as appropriate.
- (4) When parts replacement is required, the contractor shall respond within 5 days of its intention to furnish identified parts and shall provide same within 5 days after receipt of notice by the contracting officer/warranty administrator.
- 5. <u>Storage Procedures</u>. Specific tasks to be performed before placing the item in storage and while the item is in storage shall also be identified in the ALO.

6. <u>Safety Recal</u>l

- a. If a safety recall occurs during the equipment warranty period, the contractor shall, per the contract, extend the term of the warranty for each piece of equipment on an item-by-item basis, by a period equal to the time required to make necessary safety defect corrections on each piece of equipment. Extensions of warranty coverage shall be annotated in the remarks section of the equipment record jacket or as directed if equipment record jackets are not used.
- * b. Once it has been determined by the contractor that a problem is safety related, it shall be the responsibility of the contractor, as defined by the terms of the contract, to furnish a defect information report to the CMC (L), CG MCRDAC, and MCLB Albany (WS/EM), for each defect in the equipment produced under the applicable contract. This report shall be submitted within 5 working days after the defect on the equipment or components have been identified.

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- c. It shall be the responsibility of the contractor, as defined by the terms of the contract, to maintain a record of equipments initially shipped to consignees identified on the DD Form 250 (Material Inspection and Receiving Report).
- d. The contractor, as defined by the terms of the contract, shall remedy safety defects or failures, including the replacement or correction of defective parts in the Government inventory, and shall provide the Marine Corps with any reports required during the remedy process.
- e. Additionally, the contractor, as defined by the terms of the contract, shall provide all the necessary instructions for the Government to implement the remedy process, including the information required for the Marine Corps to determine the impact of the remedy process on its publications. The information regarding the remedy process will be in a format similar to that of modification instructions (MIs) or technical instructions (TIs).

7. Warranty Dispute Claim

- a. <u>Definition</u>. Failure of the Marine Corps and a contractor to agree on who is responsible to repair/replace any item submitted per the warranty procedures shall be a dispute concerning a question of fact within the meaning of the disputes clause of the contract.
- b. <u>Dispute Settlement</u>. In situations where the contractor declines to repair or replace items for which the Marine Corps believes itself to have a valid warranty claim, or when the contractor furnishes parts and services to the Marine Corps and later claims that replaced parts were not damaged due to defect in design, materials, and workmanship; a settlement will be reached through the contracting officer as follows:
 - (1) Contractor declines repair.
- (a) When a contractor, or an authorized dealer declines to repair an item under warranty, the user should notify the warranty-coordinator and proceed to repair the item. Normal supply and maintenance procedures should be used.
- (b) The warranty coordinator shall immediately report the situation by message to the MCLB (Code 856) Albany with an information copy to the user, per MCO 4855.10, as follows:
- $\underline{1}$ Identify equipment and reference original SF-368 reporting defect.

 $\underline{\mathbf{2}}$ Record "warranty dispute" and a complete description of the failure.

 $\underline{\mathbf{3}}$ Enter name, activity, and telephone number of person submitting the warrianty dispute.

 $\underline{4}$ Enter name, address, and telephone number of the contractor representative or dealership that refused the service.

5 Enter specific reason(s) given for refusal.

 $\underline{6}$ Enter the specific facts/evidence that will refute the contractor's reason(s) for refusal, including photographs and sketches, if possible.

- (c) The warranty administrator shall forward warranty disputes submitted by the warranty coordinator to the contracting officer for resolution with the contractor.
 - (2) Contractor requests reimbursement.
- (a) When the contractor makes an analysis, and claims that part(s) failure was not due to defective workmanship, materiel, or design deficiency; the Government will be invoiced for all costs and expenses incurred.
- (b) If the contracting officer decides the contractor's claim is valid, the warranty administrator will be notified.

8. <u>Cash Reimbursements From Contractors</u>

- a. Cash reimbursements from contractors shall be considered an overpayment on a public voucher and shall be collected per paragraph 043108 of the Navy Comptrollers Manual (NavCompt Manual).
- b. Any proceeds resulting from a reduction in the contract price as represented by a cash refund will revert to the appropriation concerned.
- c. When collecting the reimbursements the DD Form 1131 (Cash Collection Voucher) will be prepared per paragraph 047223-2 of the NavCompt Manual. To properly prepare the voucher the warranty administrator must ensure that the appropriation data associated with the warranted system is included on the voucher. The APO will provide that in formation to the warranty administrator in the ALO. In addition to the copies of the voucher necessary to process it through the disbursing channels the warranty administrator shall

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ensure that a copy is forwarded to the APO for the system to ensure the reimbursement is credited to the proper account. The warranty administrator shall retain a copy of the voucher as part of the information base toe be provided in the Warranty Usage Report.

9. Government Forms

- a. Record the commencement date of the warranty in the appropriate equipment record (refer to the ALO Tor appropriate form to be used).
- b. SF 368. Prepare a message in SF 368 format and forward to the MCLB (Code 856) Albany per MCO 4855.10, with an information copy to the warranty coordinator.
- c. NAVMC 10925 (EROSL). Use this form as a source document to report repair parts used/provided by the warranty dealership, using a "WP" advice code in order to establisfr demand/usage history. Ensure this usage data is reported to Marine Corps Integrated Maintenance Management System/Supported Activities Supply System (MIMMS/SASSY) per the current edition of UM 4790-5 and the following:
- (1) The purpose of the advice code "WP" is to administratively record usage data on warranty parts requisitioned "off-line" from nonsystem sources.
- (2) When consumable repair parts for a warranty item are required, the using unit shall submit a MIMMS "4" parts transaction with a "WP" advice code. This transaction will generate usage data via a "DHA" but will not pass a requisition to SASSY. The actual requisitioning of the required parts will be accomplished per the instructions provided by the warranty administrator.
- (3) Upon receipt of the warranty part, the using unit shall submit a MIMMS "8" parts transaction with the authority code of "2 to indicate receipt" for the item on the Daily Process Report and close the parts traller while capturing lead time data.
- (4) For secondary reparables, the maintenance facility effecting repair shall submit the appropriate "4" and "8" part transactions using the secondary reparable national stock number.
- d. NAVMC 1018 (Inspection/Repair Tag). Use this form to tag defective parts to be returned to the contractor, per TM-4700-15/1. Include the SF 368 number on the tag.

- e. NAVMC 10245 (Equipment Repair Order (ERO)). Prepare per TM-4700-15/1 and provide the pink/photo copy with the returned parts. Ensure usage data is reported in the MIMMS AIS per UM 4790-5.
- f. Equipment Storage Report. The contractor shall provide the blank report formats as shown in Figure 1 to the Government representative prior to equipment removal from plant. The forms shall be completed as follows (for each equipment shipped and distributed):
- (1) Part I is completed by the Government representative when the end item leaves the contractor for thee storage facility.
- (2) Part II is completed by the unit representative when the equipment is placed in storage. One copy of part II will be provided to/for:
 - (a) The contractor (Attn: Warranty Administrator)
 - (b) The ACO/PCO.
 - (c) The equipment.
 - (d) The unit files.
- (e) CG MCLB Albany, GA 31704-5000 (Attn: Warranty Administrator, Code wS/EM).
- (3) Part III is completed by the unit representative when the equipment Is removed from storage. One copy each to:
 - (a) The contractor (Attn: Warranty Administrator).
 - (b) The ACO/PCO.
 - (c) The equipment.
- (d) CG MCLB Albany, GA 31704-5000 (Attn: Warranty Administrator, Code WS/EM).
- * (e) The CG MCRDAC (PM Office).
 - (f) The unit files.

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I.	EQU	IPMENT DATA		
	A.	CONTRACT NUMBER		
	в.	EQUIPMENT SERIAL NUMBER		
	C.	DD 250 ACCEPTANCE DATE		
	D.	DD 250 SHIPMENT NUMBER		
	Ε.	MANUFACTURER'S SERIAL NUMBER		
	F.	TYPE OF STORAGE PROGRAM: MO CRSP DEPOT		
II. DEPOT STORAGE ENTRY DATA				
	A.	LOCATION		
	В.	NSN		
	C.	STORAGE DATE		
	D.	EQUIPMENT MILEAGE		
	Ε.	DATE REPORT FORWARDED TO CONTRACTOR		
	F.	DEPOT REPRESENTATIVE SIGNATURE		
	G.	TYPE OF STORAGE PROGRAM: MO CRSP DEPOT		
		MPS		
III. DEPOT STORAGE REMOVAL DATA				
	Α.	REMOVAL DATA		
	В.	EQUIPMENT MILEAGE		
	C.	FINAL DESTINATION		
	D.	DATE REPORT FORWARDED TO CONTRACTOR		
	Ε.	DEPOT REPRESENTATIVE SIGNATURE		
		Figure 1Equipment Storage Data.		

ENCLOSURE (2)

EXPECTED FAILURE CONCEPT

- 1. The expected failure concept is based upon the premise that the Marine Corps acquires weapon systems to satisfy a stated requirement. Specifically, the Marine Corps will identify a minimum level of reliability for the system being acquired. This reliability will usually be expressed in terms, such as mean time between failure or failure rate and operating hours for the system. During the design of the system, the developing contractor will allocate reliability requirements to subsystems, components, and piece parts that make up the system. Because of limitations (which include cost, technology, and materials) that exist in the acquisition of a system the Marine Corps seldom, if ever, requires a system to possess 100 percent reliability. The Marine Corps recognizes and plans for periodic equipment failures; however, the Marine Corps wants to ensure that these failures do not exceed those normally expected when a certain level of reliability is specified and the system is being utilized in the operating cycle designed for. As long as the system does not exceed the number of failures expected, the contractor has met the specified reliability and should not be held liable if the system fails. When the failures exceed the number expected, the contractor has failed to meet the requirements of the contract and the Marine Corps should seek corrective action for the deficiency.
- 2. To apply this concept to warranty requirements for the system, first, determine the desired duration of the warranty. Be sure to include in that determination any time that system will be in storage after acceptance by the Government. Next, determine the operating hours during the warranty period. Using that figure and the reliability value specified in the contract, calculate the expected number of failures for that system during the warranty period. Multiply that figure by the number of systems covered in that production lot. The result is the expected number of failures for the system under warranty. This figure is the threshold that must be breached to invoke the warranty. As long as the number of failures is below the threshold, the contractor is not liable; when the threshold is breached each failure becomes a warranty claim. Expected failure thresholds should be determined for all components reparable at fourth echelon or higher to be covered by the warranty. The warranty coordinator will report all failures of warranted items to the warranty administrator, who will track the failures and determine when the threshold is breached. Once breached the warranty administrator invokes the warranty by notifying the contracting officer using procedures detailed in

ENCLOSURE (3)

enclosure (2). An example follows:

SU = SYSTEMS USAGE (HOURS, MILES, ETC.)

MTBF = MEAN TIME BETWEEN FAILURE

SYS = NUMBER OF SYSTEMS IN PRODUCTION LOT

F = NUMBER FAILURES

SU = 20000

MTBF = 1000 HRS.

SYS = 100

F = X

SU / MTBF x # SYS = X

 $20000 / 1000 \times 100 = X$ or 2000 is the expected number of failures for the system. When the 2001st failure is recorded then the warranty administrator would start submitting warranty claims.

ENCLOSURE (3)

WARRANTY USAGE REPORT
NOMENCLATURE, NSN, MODEL #
REPORT SYMBOL MC-4105-01

Usage Limits Hrs/rds/miles	
Warranty Duration	
Serial Lot Registration #	
ALO No.	
Federal Supply Code of Manuf (FSCM)	
Contractor	
Contract Number	

ENCLOSURE (4)

MCO 4105.2 4 Nov 1987

Claim Data	Reason for Denial	
	\$ Denied	
	\$ Honored \$ Disputed	
	\$ Honored	
	# Sulmitted	• Company
Contract Cost of Warranty and Item Cost		parate remarks
End date	Varianty Expiration	ed attach a se
Γ	Start Late of 1st Item Warranty Period	* Note: If desired attach a separate remarks page.

ENCLOSURE (4)